

AMENDMENT TO THE CLAIMS

Claims 1-59 (Cancelled)

Claim 60 (Currently Amended) A communication device applied to each apparatus forming a network system comprising:

transmission processing means for transmitting ~~various kinds of~~ data;

timer means for counting a continuous operation request effective time during which transmitted data is always received;

transmission control means for controlling the transmission processing means to transmit data in which is set continuous operation request information causing the timer means in a communication device applied to an intermittent apparatus that receives data intermittently to start counting the continuous operation request effective time, and for starting its own timer means to count the continuous operation request effective time;

reception processing means for receiving ~~various kinds of~~ data;

reception control means for controlling the reception processing means;

transmission interface means for accepting transmission destination information specifying whether data is to be transmitted by a broadcast or simplex transmission from an apparatus main body and for delivering the transmission destination information to the transmission control means; and

transmission setting holding means for holding transmission setting information that is enabled or disabled ~~from an outside,~~

wherein the reception control means in the communication device applied to the intermittent apparatus starts its own timer means to count the continuous operation request effective time upon receipt of the data in which is set the continuous operation request information at its own reception processing means, and

wherein the transmission control means determines transmission control processing, in which presence or absence of the continuous operation request information and ~~the~~ a number of transmissions of data are specified in advance, depending on the transmission destination information, the transmission setting information, and whether the timer means is counting the continuous operation request effective time, and transmits data generated according to the determined transmission control processing to the transmission processing means.

Claim 61 (Currently Amended) The communication device according to Claim 60, wherein:

in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted once.

Claim 62 (Currently Amended) The communication device according to Claim 60, wherein:

in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted repetitively over a period longer than ~~the~~ an intermittent cycle.

Claim 63 (Currently Amended) The communication device according to Claim 60, wherein:

in a case where the transmission destination information specifies a broadcast transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted once.

Claim 64 (Currently Amended) The communication device according to Claim 60, wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is not set in the data and the data is transmitted once.

Claim 65 (Currently Amended) The communication device according to Claim 60,
wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted once.

Claim 66 (Currently Amended) The communication device according to Claim 60,
wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted repetitively over a period longer than ~~the~~ an intermittent cycle.

Claim 67 (Currently Amended) The communication device according to Claim 60,
wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where

the timer means is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is not set in the data and the data is transmitted repetitively over a period longer than ~~the~~ an intermittent cycle.

Claim 68 (Currently Amended) The communication device according to Claim 60, wherein:

in a case where the transmission destination information specifies a simplex transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the continuous operation request information is not set in the data and the data is transmitted once.

Claim 69 (Previously Presented) The communication device according to Claim 60, further comprising:

reception setting holding means for holding reception setting information specifying whether data is received continuously or data is received intermittently by the reception means;

wherein in a case where the timer means is counting the continuous operation request effective time or the reception setting information specifies a continuous reception, the reception control means controls the reception means to receive the data continuously, and in a case where the timer means is not counting the continuous operation request effective time and the reception setting information specifies an intermittent reception, the reception control means controls the

reception means to receive the data intermittently.

Claim 70 (Currently Amended) The communication device according to Claim 60, wherein:

the network system is constructed from one controller, and plural apparatuses other than the controller;

plural timer means are present in the communication device applied to the controller; and
in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where all the timer means are within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted once or transmitted repetitively.

Claim 71 (Currently Amended) The communication device according to Claim 70, wherein:

in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where at least one timer means is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted repetitively

over a period longer than an intermittent cycle.

Claim 72 (Currently Amended) The communication device according to Claim 70,
wherein:

in a case where the transmission destination information specifies a broadcast transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted once.

Claim 73 (Currently Amended) The communication device according to Claim 70,
wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is not set in the data and the data is transmitted once.

Claim 74 (Currently Amended) The communication device according to Claim 70,
wherein:

in a case where the transmission destination information specifies a simplex transmission,

the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted once.

Claim 75 (Currently Amended) The communication device according to Claim 70, wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is set in the data and the data is transmitted repetitively over a period longer than an intermittent cycle.

Claim 76 (Currently Amended) The communication device according to Claim 70, wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is outside the continuous operation request effective time, the transmission control means performs the transmission control

processing by which the continuous operation request information is not set in the data and the data is transmitted repetitively over a period longer than an intermittent cycle.

Claim 77 (Currently Amended) The communication device according to Claim 70, wherein:

in a case where the transmission destination information specifies a simplex transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the continuous operation request information is not set in the data and the data is transmitted once.

Claim 78 (Currently Amended) The communication device according to Claim 70, further comprising:

reception setting holding means for holding reception setting information specifying whether data is received continuously or data is received intermittently by the reception means,

wherein in a case where the ~~time~~ timer means is counting the continuous operation request effective time or the reception setting information specifies a continuous reception, the reception control means controls the reception means to receive the data continuously, and in a case where the timer means is not counting the continuous operation request effective time and the reception setting information specifies an intermittent reception, the reception control means controls the reception means to receive the data intermittently

Claim 79 (Currently Amended) A communication device applied to each apparatus forming a network system comprising:

transmission processing means for transmitting ~~various kinds of~~ data;

timer means for counting a continuous operation request effective time during which transmitted data is always received;

transmission control means for controlling the transmission processing means to transmit a continuous operation request signal causing the timer means in a communication device applied to an intermittent apparatus that receives data intermittently to start counting the continuous operation request effective time, and for starting its own timer means to count the continuous operation request effective time;

reception processing means for receiving ~~various kinds of~~ data;

reception control means for controlling the reception processing means;

transmission interface means for accepting transmission destination information specifying whether transmission data including a message to be transmitted is to be transmitted by a broadcast or simplex transmission from an apparatus main body and for delivering the transmission destination information to the transmission control means; and

transmission setting holding means for holding transmission setting information that is enabled or disabled ~~from an outside~~,

wherein the reception control means in the communication device applied to the intermittent apparatus starts its own timer means to count the continuous operation request effective time upon receipt of the continuous operation request signal at its own reception processing means, and

wherein the transmission control means determines transmission control processing, in which the continuous operation request signal and ~~the~~ a number of transmissions of the transmission data are specified in advance, depending on the transmission destination information, the transmission setting information, and whether the timer means is counting the continuous operation request effective time, and transmits data generated according to the determined transmission control processing to the transmission processing means.

Claim 80 (Currently Amended) The communication device according to Claim 79, wherein:

in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request information is transmitted once and then the transmission data is transmitted once.

Claim 81 (Currently Amended) The communication device according to Claim 79, wherein:

in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is outside the continuous operation request effective time, the

transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted repetitively over a period longer than ~~a~~ an intermittent cycle and then the transmission data is transmitted once.

Claim 82 (Previously Presented) The communication device according to Claim 79, wherein:

in a case where the transmission destination information specifies a broadcast transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted once and then the transmission data is transmitted once.

Claim 83 (Currently Amended) The communication device according to Claim 79, wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the transmission data is transmitted once.

Claim 84 (Currently Amended) The communication device according to Claim 79,

wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted once and then the transmission data is transmitted once.

Claim 85 (Currently Amended) The communication device according to Claim 79,

wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted repetitively over a period longer than ~~the~~ an intermittent cycle and then the transmission data is transmitted once.

Claim 86 (Currently Amended) The communication device according to Claim 79,

wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means is outside the continuous operation request effective time, the transmission

control means performs the transmission control processing by which the transmission data is transmitted repetitively over a period longer than ~~the~~ an intermittent cycle.

Claim 87 (Previously Presented) The communication device according to Claim 79, wherein:

in a case where the transmission destination information specifies a simplex transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the transmission data is transmitted once.

Claim 88 (Previously Presented) The communication device according to Claim 79, further comprising:

reception setting holding means for holding reception setting information specifying whether data is received continuously or data is received intermittently by the reception means,

wherein in a case where the timer means is counting the continuous operation request effective time or the reception setting information specifies a continuous reception, the reception control means controls the reception means to receive the data continuously, and in a case where the timer means is not counting the continuous operation request effective time and the reception setting information specifies an intermittent reception, the reception control means controls the reception means to receive the data intermittently.

Claim 89 (Currently Amended) The communication device according to Claim 79,

wherein:

the network system is constructed from one controller and plural apparatuses other than the controller;

plural timer means are present in the communication device applied to the controller; and
in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where all the timer means are within the continuous operation request effective time, the transmission control means either performs the transmission control processing by which the continuous operation request signal is transmitted once and then the transmission data is transmitted once or performs the transmission control processing by which the continuous operation request signal is transmitted repetitively over a period longer than ~~the~~ an intermittent cycle and then the transmission data is transmitted once.

Claim 90 (Currently Amended) The communication device according to Claim 89, wherein:

in a case where the transmission destination information specifies a broadcast transmission, the transmission setting information specifies a state of having been enabled, and in a case where at least one timer means is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted repetitively over a period longer than the intermittent cycle and then the transmission data is transmitted once.

Claim 91 (Previously Presented) The communication device according to Claim 89,
wherein:

in a case where the transmission destination information specifies a broadcast transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted once and then the transmission data is transmitted once.

Claim 92 (Currently Amended) The communication device according to Claim 89,
wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is within the continuous operation request effective time, the transmission control means performs the transmission control processing by which the transmission data is transmitted once.

Claim 93 (Currently Amended) The communication device according to Claim 89,
wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is within the continuous operation

request effective time, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted once and then the transmission data is transmitted once.

Claim 94 (Currently Amended) The communication device according to Claim 89, wherein:

in a case where the transmission destination information specifies a simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the continuous operation request signal is transmitted by repeating a period longer than the intermittent cycle and then the transmission data is transmitted once.

Claim 95 (Currently Amended) The communication device according to Claim 89, wherein:

in a case where the transmission destination information indicates the simplex transmission, the transmission setting information specifies a state of having been enabled, and in a case where the timer means correlated with a transmission destination is outside the continuous operation request effective time, the transmission control means performs the transmission control processing by which the transmission data is transmitted repetitively over a period longer than the intermittent cycle.

Claim 96 (Previously Presented) The communication device according to Claim 89, wherein:

in a case where the transmission destination information specifies a simplex transmission and the transmission setting information specifies a state of having been disabled, the transmission control means performs the transmission control processing by which the transmission data is transmitted once.

Claim 97 (Previously Presented) The communication device according to Claim 89, further comprising:

reception setting holding means for holding reception setting information specifying whether data is received continuously or data is received intermittently by the reception means,

wherein in a case where the timer means is counting the continuous operation request effective time or the reception setting information specifies a continuous reception, the reception control means controls the reception means to receive the data continuously, and in a case where the timer means is not counting the continuous operation request effective time and the reception setting information specifies an intermittent reception, the reception control means controls the reception means to receive the data intermittently.

Claim 98 (Currently Amended) A communication method for a network system including a communication device that receives data intermittently, characterized in that:

a communication device at a transmission end includes a transmission control step of transmitting data in which is set continuous operation request information causing timer means in a communication device that performs an intermittent reception to start counting a continuous operation request effective time, and starting its own timer means to count the continuous operation request effective time; and

the communication device that performs the intermittent reception and performs a continuous reception operation within the continuous operation request effective time includes a reception control step of starting its own timer means to count the continuous operation request effective time upon receipt of the data in which the continuous operation request information is set,

wherein the transmission control step includes:

_____a transmission setting reading step of reading out a state of a transmission setting that is enabled or disabled;

_____a timer starting step of starting the timer means to count the continuous operation request effective time;

_____an appending step of appending the continuous operation request information to transmission data;

_____a broadcast transmission step for an intermittent reception of transmitting the transmission data by a broadcast transmission over a period longer than an intermittent cycle assuming that the transmission data is received at another communication terminal that performs an intermittent reception operation;

_____a broadcast transmission step for a continuous reception of transmitting the

transmission data by a broadcast transmission over a period shorter than the intermittent cycle assuming that the transmission data is received at another communication terminal that performs a continuous reception operation;

_____ a simplex transmission step for an intermittent reception of transmitting the transmission data by a simplex transmission over a period longer than the intermittent cycle assuming that the transmission data is received at another communication terminal that performs an intermittent reception operation; and

_____ a simplex transmission step for a continuous reception of transmitting the transmission data by a simplex transmission over a period shorter than the intermittent cycle assuming that the transmission data is received at another communication terminal that performs a continuous reception operation.

Claim 99 (Previously Presented) The communication method according to Claim 98, wherein a communication device carrying out a broadcast transmission performs:

the appending step and the broadcast transmission step for an intermittent reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the appending step and the broadcast transmission step for a continuous reception followed by the timer starting step in any other case.

Claim 100 (Currently Amended) The communication method according to Claim 98, wherein a communication device carrying out a simplex transmission performs:

the appending step and the simplex transmission step for an intermittent reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in any other case.

Claim 101 (Previously Presented) The communication method according to Claim 98, wherein a communication device carrying out a simplex transmission performs:

the appending step and the simplex transmission step for a continuous reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is within the continuous operation request effective time;

the appending step and the simplex transmission step for an intermittent reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 102 (Previously Presented) The communication method according to Claim 98, wherein a communication device carrying out a simplex transmission performs:

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is within the continuous operation request effective time;

the simplex transmission step for an intermittent reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 103 (Currently Amended) A communication method for a network system including a communication device that receives data intermittently, characterized in that:

a communication device at a transmission end includes a transmission control step of transmitting a continuous operation request signal causing timer means in a communication device that performs an intermittent reception to start counting a continuous operation request effective time, and starting its own timer means to count the continuous operation request effective time; and

the communication device that performs the intermittent reception and performs a continuous reception operation within the continuous operation request effective time includes a reception control step of starting its own timer means to count the continuous operation request

effective time upon receipt of the continuous operation request signal,

wherein the transmission control step includes:

_____a transmission setting reading step of reading out a state of a transmission setting that is enabled or disabled;

_____a timer starting step of starting the timer means to count the continuous operation request effective time;

_____a signal generating step of generating the continuous operation request signal;

_____a broadcast transmission step for an intermittent reception of transmitting the continuous operation request signal by a broadcast transmission over a period longer than an intermittent cycle assuming that the continuous operation request signal is received at a communication device that performs an intermittent reception operation;

_____a broadcast transmission step for a continuous reception of transmitting the continuous operation request signal by a broadcast transmission over a period shorter than the intermittent cycle assuming that the continuous operation request signal is received at another communication device that performs a continuous reception operation;

_____a simplex transmission step for an intermittent reception of transmitting the continuous operation request signal by a simplex transmission over a period longer than the intermittent cycle assuming that the continuous operation request signal is received at another communication device that performs an intermittent reception operation; and

~~_____a broadcast transmission step for a continuous reception of transmitting the continuous operation request signal by a broadcast transmission over a period shorter than the intermittent cycle assuming that the continuous operation request signal is received at another~~

~~communication device that performs a continuous reception operation; and~~

_____a simplex transmission step for a continuous reception of transmitting the continuous operation request signal by a simplex transmission over a period shorter than the intermittent cycle assuming that the continuous operation request signal is received at another communication device that performs a continuous reception operation.

Claim 104 (Previously Presented) The communication method according to Claim 103, wherein a communication device carrying out a broadcast transmission performs:

the signal generating step and the broadcast transmission step for an intermittent reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the signal generating step and the broadcast transmission step for a continuous reception followed by the timer starting step in any other case.

Claim 105 (Previously Presented) The communication method according to Claim 103, wherein a communication device carrying out a simplex transmission performs:

the signal generating step and the simplex transmission step for an intermittent reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in any other case.

Claim 106 (Previously Presented) The communication method according to Claim 103, wherein a communication device carrying out a simplex transmission performs:

the signal generating step and the simplex transmission step for a continuous reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is within the continuous operation request effective time;

the signal generating step and the simplex transmission step for an intermittent reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 107 (Previously Presented) The communication method according to Claim 103, wherein a communication device carrying out a simplex transmission performs:

the simplex transmission step for an intermittent reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means is within the continuous operation request effective time;

the simplex transmission step for an intermittent reception in a case where the

transmission setting read out in the transmission setting reading step is enabled and the timer means is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 108 (Currently Amended) The communication method according to Claim 98, wherein:

the network system is constructed from one controller that performs a continuous reception and plural apparatuses other than the controller;

plural timer means are present in the communication device applied to the controller; and

the communication device applied to the controller and carrying out a broadcast transmission performs the appending step, and the broadcast transmission step for an intermittent reception followed by the timer starting step of starting all the plural timer means to count the continuous operation request effective time, in a case where the transmission setting read out in the transmission setting reading step is enabled and in a case where at least one timer means is outside the continuous operation request effective time, and performs the appending step, and the broadcast transmission step for a continuous reception followed by the timer starting step of starting all the plural timer means to count the continuous operation request effective time in any other case.

Claim 109 (Previously Presented) The communication method according to Claim 108,

wherein the communication device applied to the controller and carrying out a simplex transmission performs:

the appending step and the simplex transmission step for an intermittent reception followed by the timer starting step of starting the timer means correlated with a transmission destination to count the continuous operation request effective time in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with the transmission destination is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in any other case.

Claim 110 (Previously Presented) The communication method according to Claim 108, wherein the communication device applied to the controller and carrying out a simplex transmission performs:

the appending step and the simplex transmission step for a continuous reception followed by the timer starting step in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with a transmission destination is within the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 111 (Previously Presented) The communication method according to Claim 108,

wherein the communication device applied to the controller and carrying out a simplex transmission performs:

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with a transmission destination is within the continuous operation request effective time;

the simplex transmission step for an intermittent reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with the transmission destination is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 112 (Currently Amended) The communication method according to Claim 101, wherein:

the network system is constructed from one controller that performs a continuous reception and plural apparatuses other than the controller;

plural timer means are present in the communication device applied to the controller;

the communication device applied to the controller and carrying out a broadcast transmission performs the signal generating step, and the broadcast transmission step for an intermittent reception followed by the timer starting step of starting all the plural timer means to count the continuous operation request effective time, ₂ in a case where the transmission setting read out in the transmission setting reading step is enabled and in a case where at least one timer

means is outside the continuous operation request effective time, and performs the signal generating step, and the broadcast transmission step for a continuous reception followed by the timer starting step of starting all the plural timer means to count the continuous operation request effective time in any other case.

Claim 113 (Previously Presented) The communication method according to Claim 112, wherein the communication device applied to the controller and carrying out a simplex transmission performs:

the signal generating step and the simplex transmission step for an intermittent reception followed by the timer starting step of starting the timer means correlated with a transmission destination to count the continuous operation request effective time in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with the transmission destination is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in any other case.

Claim 114 (Previously Presented) The communication method according to Claim 112, wherein the communication device applied to the controller and carrying out a simplex transmission performs:

the signal generating step and the simplex transmission step for a continuous reception followed by the timer starting step in a case where the transmission setting read out in the

transmission setting reading step is enabled and the timer means correlated with a transmission destination is within the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.

Claim 115 (Currently Amended) The communication method according to Claim 112, wherein the communication device applied to the controller and carrying out a simplex transmission performs:

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with a transmission destination is within the continuous operation request effective time;

the simplex transmission step for an intermittent reception in a case where the transmission setting read out in the transmission setting reading step is enabled and the timer means correlated with the transmission destination is outside the continuous operation request effective time; and

the simplex transmission step for a continuous reception in a case where the transmission setting read out in the transmission setting reading step is disabled.